

IEIP Brief

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An Update on Activities at the International Emerging Infections Program, Thailand

SARS activities in Thailand started quietly on March 11, when Dr. Tim Uyeki passed through on his way to Hanoi to investigate a cluster of pneumonia. That night, an ill WHO physician arrived in Bangkok from Hanoi, and IEIP staff have been engaged in the SARS response in Asia nearly full time since. IEIP, with its strategic location in Bangkok, and its range of technically skilled staff and ample resources on hand, has contributed much needed agility to WHO and CDC in regional responses to the rapidly expanding outbreak in the region. Most of the IEIP efforts have been directed towards assisting the Ministry of Public Health in containing the outbreak in Thailand, but IEIP teams have also been deployed in response to requests for assistance from Taiwan, Laos, Hong Kong, and Beijing. – *Scott Dowell*

Outbreak Response

Twenty minutes after notification of the impending arrival of the WHO physician, Dr. Carlo Urbani, IEIP staff meet him at the airport, sequestered him from others, and ensured his safe transportation to hospital. After nearly 3 weeks of care by a team of Thai and international physicians, Dr. Urbani died from respiratory failure on March 29. Much has been written about Dr. Urbani's pivotal role in alerting the world to the dangers of SARS, but those in Thailand who came to know him as a friend and colleague felt the sense of failure and loss most acutely. Thankfully, the infection control measures hastily assembled that first night held, and all 70 staff exposed to him during his hospitalization remain well.

IEIP has served in a variety of roles for regional outbreak response. In addition to rapid deployments of staff, IEIP has provided logistic support for shipments of specimens from Vietnam, Thailand, and Taiwan, and assisted the WHO Thailand regional logistic support center. CDC staff from Atlanta and elsewhere have used IEIP as a staging area for travel arrangements, supply purchases, and communications.

Research

IEIP staff have collaborated with epidemiologists in Taiwan, Hong Kong, and Singapore, in a project to evaluate the risk of SARS transmission on aircraft. One of the flights under investigation was on March 15, from Hong Kong to Beijing carrying 120 passengers and crew; one passenger was ill with fever. The ill passenger was hospitalized in Beijing on March 15, where he was diagnosed with atypical pneumonia and died on March 20. A mean of 4 days after the flight, 22 additional passengers and crew became ill and met the WHO definition for a probable case of SARS. Illness in passengers was related to proximity to the index case, with 8/23 seated within 3 rows in front of the case becoming ill, compared to 10/88 seated elsewhere (relative risk=3.1, 95% confidence interval=1.4-6.9). These data suggest that SARS transmission can occur on aircraft when infected persons fly during the symptomatic phase.



Mark Simmerman performing a fit test on Pongsri Virapat, GAP coordinator, in preparation for mobile SARS response team deployment.

Surveillance

Dr. Khanchit has led the IEIP response to SARS in the Thai MOPH, joining the Bureau of Epidemiology's (BOE) surveillance group full time since March. Two EIS officers from U.S. CDC, Drs. Michael O'Leary and Nolan Lee, worked closely with BOE to develop a checklist and information packet on infection control practices for case investigation by mobile teams. All U.S. CDC professional staff volunteered to be on-call to join mobile team for case investigation. In addition, nursing staff from HIV research sites and IEIP have joined in the case ascertainment and contact follow-up activities with BOE.

Training

On-call mobile teams, led by TUC Director, Dr. Jordan Tappero, have trained staff at more than 20 hospitals in Thailand to investigate suspect cases and ensure that health care workers and visitors were adequately protected.